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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,785	12/20/2000	William J. Curatolo	PC10755AJTJ	8464

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PATENT DEPARTMENT
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EXAMINER	
FUBARA, BLESSING M	
ART UNIT	**PAPER NUMBER**
1618	

NOTIFICATION DATE	DELIVERY MODE
10/14/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

~IPGSGro@pfizer.com

Office Action Summary	Application No.	Applicant(s)	
	09/742,785	CURATOLO ET AL.	
	Examiner	Art Unit	
	BLESSING M. FUBARA	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 June 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,29,156 and 164-168* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,29,156 and 164-168* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The examiner acknowledges receipt of amendment and remarks filed 6/05/09. Claims 1, 164 and 16 are amended. Claims 1, 2, 29, 156 and 164-168 are pending.

Response to Arguments

1. Previous rejections, such as the rejections under 35 U.S.C. 112 that are not reiterated herein are withdrawn in view of the amendment to the claims.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 29 and 167 and 168 are rejected under 35 U.S.C. 102(b) as being anticipated by Dunn (US 4,461,759) for reasons of record and as reiterated herein below with modification to address the pH of claim 167 and the solubility of claims 1 and 164.

4. Claims 1 and 164 are amended to say that the aqueous solubility of the drug is up to about 1 to 2 mg/mL. This solubility is the property of the drug and if a prior art teaches the same drugs that are of low solubility, then, the drug in the prior art would inherently have that solubility recited in claims 1 and 164.

5. Claim 167 has also been amended to say that the aqueous solubility is less than 0.01 mg/mL at pH of 1 to 8. This solubility is also a property of the drug and because the prior art teaches the same drugs such as verapamil, the drug of the prior art would also have this property.

6. Dunn discloses a composition that comprises a composition that comprises verapamil or pharmaceutically acceptable salt and acid retardant cellulose derivative (abstract; column 3, lines 6-15) and when cellulose acetate phthalate is the acid retardant, the drug and the cellulose acetate phthalate and/or bulking or disintegrant agent are granulated (column 4, lines 30-35). Verapamil is poorly soluble in water. The drug is particulate (column 2, line 32; column 3, line 8; column 4, lines 31-33) meeting the requirements for particles. While Dunn does not describe cellulose acetate phthalate as a concentration-enhancing polymer, the instant claims recite cellulose acetate phthalate as one of the concentration enhancing polymers. Verapamil is substantially insoluble in water while the hydrochloride salt is soluble in water as evidenced by paragraph [0042] of US 20010046503, thus meeting the requirement for the poor solubility drug. Verapamil is an anti-hypertensive and meets claim 29. Aqueous solubility of up to about 1 to 2 mg/mL as recited in claims 1 and 164 or less than 0.01 mg/mL as recited in claim 167 is a property of the drug so that Dunn meets these claims. Claim 168 is a product by process so that claim 168 is met by Dunn.

While Dunn uses the hydrochloride salt in the examples, it is noted that Dunn states that **verapamil or pharmaceutically acceptable salt** (abstract; column 3, lines 6 and 7) and thus, Dunn specifically contemplates verapamil as well as the pharmaceutically acceptable salt such as the hydrochloride. It is also noted that the claims do not recite any specific solubility except that the claims state a relative solubility. The instant composition comprises … and the instant

claims do not recite a physical mixture and the prior art does not describe a chemical interaction between the drug and the polymer where a covalent or ionic bond is formed.

Response to Arguments

7. Applicant remarks at page 5 of the response filed 6/05/09 that the arguments filed 12/08/08 are reiterated. However, those remarks and arguments filed 12/08/08 were fully addressed in the office action of 03/05/09 and the response is incorporated herewith and reproduced for applicant.

8. Applicant's arguments filed 12/08/08 have been fully considered but they are not persuasive.

9. *Applicant argues the Verapamil in Dunn is water soluble at 100 mg/mL citing column 2, lines 65-67. The examiner disagrees. Dunn contemplates formulation that comprises verapamil or pharmaceutically active salt of the verapamil (see the abstract; column 4, line 6). Applicant's reference to column 2, lines 65-67 has to do with the pharmaceutical salt or the hydrochloride salt and verapamil is known to be insoluble in water and the hydrochloride salt is known to be soluble in water as evidenced by paragraph [0042] of US 20010046503. It is true that the examples use verapamil hydrochloride, but when the whole document is considered, it is clear that Dunn contemplates the use of verapamil base. A prior art reference is not limited by the working examples, but the reference must be considered as a whole for what it teaches.*

10. Claims 1, 2, 29, 164, 167 and 168 remain rejected under 35 U.S.C. 102(b) as being anticipated by Okada et al. (US 5,496,561) for reasons of record and reiterated herein below with modification to address the pH of claim 167 and the solubility of claims 1 and 164.

11. Claims 1 and 164 are amended to say that the aqueous solubility of the drug is up to about 1 to 2 mg/mL. This solubility is the property of the drug and if a prior art teaches the same drugs that are of low solubility, then, the drug in the prior art would inherently have that solubility recited in claims 1 and 164.

12. Claim 167 has also been amended to say that the aqueous solubility is less than 0.01 mg/mL at pH of 1 to 8. This solubility is also a property of the drug and because the prior art teaches the same drugs such as diclofenac, which is one of the drugs disclosed in Okada has analgesic, anti-inflammatory and antipyretic activities; and thus Okada meets the limitation of instant claim 29. Therefore, the drug of the prior art would also have this property.

13. Okada discloses a controlled release pharmaceutical composition comprising crystalline form of a drug (column 3, line 32); polymer such as hydroxypropylmethylcellulose acetate succinate, hydoxypropylmethylcellulose phthalate, cellulose acetate phthalate and carboxymethylethyl cellulose (column 3, lines 36-39, column 4, lines 20-25); plasticizers such as triethyl citrate, triacetin, polyethylene glycol, castor oil, polysorbitan monooleate, glycerin fatty acid ester (column 5, lines 5-8).

14. The instant application claims a composition that comprises a drug in a pharmaceutically acceptable solubility-improved form and a concentration-enhancing polymer is a salt and several examples of drugs that are suitable in the instant invention are listed in the specification (page 30, line 31 to page 31 line 5, page 35, line 13 to page 36 line 26 and page 26, line 30 to page 29 line 18). In the instant application, the recitation that the composition achieves a maximum equilibrium concentration of at least 2-fold of a drug … is a property of the drug composition and property of a composition is not separable from the composition; and thus the composition of the prior art would inherently achieve said equilibrium concentration relative to the drug.

15. Instant claims 2 and 167 recite the property of the composition and the teaching of Okada meets the limitations of said claims; diclofenac, which is one of the drugs disclosed in Okada has analgesic, anti-inflammatory and antipyretic activities; and thus Okada meets the limitation of instant claim 29. Claim 168 is a product by process so that claim 168 is met by Okada. Aqueous solubility of up to about 1 to 2 mg/mL as recited in claims 1 and 164 or less than 0.01 mg/mL as recited in claim 167 is a property of the drug so that Okada meets these claims

Response to Arguments

16. Applicant remarks at page 5 of the response filed 6/05/09 that the arguments filed 12/08/08 are reiterated. However, those remarks and arguments filed 12/08/08 were fully addressed in the office action of 03/05/09 and the response is incorporated herewith and reproduced for applicant.

17. Applicant's arguments filed 12/08/08 have been fully considered but they are not persuasive.

18. Applicant argues that Okada formulates the composition by forming a solution of drug and HPC and spraying the solution onto spherical sugar pills and that HPC is not one of the polymers of the claims. The examiner disagrees with the traversal because a), the claims are directed to composition and how the composition is made is not given patentable weight since the claims are not process/method claims.

19. Applicant has cited Examples 1-12 of Okada to support applicant's contention that the HPC used in these examples are not the polymers of the claims. However, Okada teaches and contemplates the use of hydroxypropylmethylcellulose acetate succinate, hydoxypropylmethylcellulose phthalate, cellulose acetate phthalate and carboxymethylethyl

cellulose (column 3, lines 36-39, column 4, lines 20-25). While the examiner agrees with the applicant that the Examples uses only HPC, it is noted that a prior art reference is not limited to the examples, but the reference must be considered as a whole for what it teaches.

20. Claims 1, 2, 29, 156, 164, 167 and 168 are rejected under 35 U.S.C. 102(e) as being anticipated by Bymaster et al. (US 6,147,072) for reasons of record and as reiterated herein below with modification to address the pH of claim 167 and the solubility of claims 1 and 164.

21. Claims 1 and 164 are amended to say that the aqueous solubility of the drug is up to about 1 to 2 mg/mL. This solubility is the property of the drug and if a prior art teaches the same drugs that are of low solubility, then, the drug in the prior art would inherently have that solubility recited in claims 1 and 164.

22. Claim 167 has also been amended to say that the aqueous solubility is less than 0.01 mg/mL at pH of 1 to 8. This solubility is also a property of the drug and because the prior art teaches the same drugs such as olanzapine, clozapine, risperidone, sertindole, quetiapine and ziprasidone, the drug of the prior art would also have this property.

23. Bymaster discloses treating psychosis, acute mania, mild anxiety states or depression by administering to a patient in need thereof a composition that comprises a first component drug selected from olanzapine, clozapine, risperidone, sertindole, quetiapine and ziprasidone, and a second component (abstract; column 1, lines 42-46; column 2, line 9-51; and claim 2), and the composition is formulated as tablets, chewable tablets, capsules, solutions, intranasal sprays or powders, troches, suppositories, transdermal patches and suspensions (column 10, lines 8-12) and polymers such as hydroxypropyl methylcellulose phthalate and hydroxypropyl methylcellulose acetate succinate are associated with the drug (column 10, lines 61-67). Claims

2 and 167 recite the properties of the drug and since the drugs in Bymaster meet the limitations of the drugs in claims 29 and 156, then, the specific drugs of Bymaster would have the properties recited in the claims 2 and 167. Claim 168 is a product by process and because Bymaster teaches the composition, Bymaster meets the product of claim 168. The ziprasidone of Bymaster meets claim 156. Aqueous solubility of up to about 1 to 2 mg/mL as recited in claims 1 and 164 or less than 0.01 mg/mL as recited in claim 167 is a property of the drug so that Bymaster meets these claims

Response to Arguments

24. Applicant remarks at page 5 of the response filed 6/05/09 that the arguments filed 12/08/08 are reiterated. However, those remarks and arguments filed 12/08/08 were fully addressed in the office action of 03/05/09 and the response is incorporated herewith and reproduced for applicant.

25. Applicant's arguments filed 12/08/08 have been fully considered but they are not persuasive.

26. Applicant argues that Bymaster coats the drug with HPMCAS and does not disclose particles that are in dry physical mixture according to the claims. The examiner agrees that Bymaster contemplates coating the core with hydroxypropyl methylcellulose phthalate or hydroxypropyl methylcellulose acetate succinate. However, the layer between the core and the enteric coat is optional so that the enteric coat is in direct contact with the core of anti-psychotic drug, and the physical mixture thus reads on the composition/product having the enteric polymer in direct contact with the core. Thus, a physical mixture is given it broadest interpretation to mean a physical mixture and Bymaster did not indicate any where that the coating process involves chemical reaction between the core and the polymer. A dosage form in which an

enteric coating material such as the polymers in the generic claims coats a core is a physical mixture in the broadest sense and Bymaster has not contemplated chemical reaction between the coating material and the core.

Claim Rejections - 35 USC § 103

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

28. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

29. Claims 1, 164-166 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn (US 4,461,759) or Okada et al. (US 5,496,561) or Bymaster et al. (US 6,147,072).

30. Dunn has been shown above to anticipate claim 1. Okada has also been shown above to anticipate claims 1 and 164. Bymaster has also been described above to anticipate claims 1 and 164. Claims 165 and 166 depend on claim 1 or 164. Neither Dunn, nor Okada, nor Bymaster teaches the salts of these water insoluble drugs in the forms recited in claims 165 and 166.

However, the salts recited in claims 165 and 166 are known salts. Since Dunn, Okada and Bymaster contemplate the use of pharmaceutical salts of the poorly water soluble drugs, taking the individual teachings of Dunn, Okada and Bymaster as it relates to pharmaceutical salts, one having ordinary skill in the art at the time the invention was made would reasonably expect that the compositions of Dunn, Okada or Bymaster could be successfully formulated using the salts of these drugs including those recited in claims 165 and 166 and the enteric polymers to arrive at product that is at least 2-fold more soluble than the starting salt.

Response to Arguments

31. Applicant remarks at page 5 of the response filed 6/05/09 that the arguments filed 12/08/08 are reiterated. However, those remarks and arguments filed 12/08/08 with regards to the rejections under 35 USC 102 were fully addressed in the office action of 03/05/09. However, the remarks of 12/08/09 did not contain arguments against the rejections under 35 USC 103 over Dunn (US 4,461,759) or Okada et al. (US 5,496,561) or Bymaster et al. (US 6,147,072).

32. But, applicant's arguments filed 12/08/08, as those arguments may apply to the rejection of claims 1, 164-166 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn (US 4,461,759) or Okada et al. (US 5,496,561) or Bymaster et al. (US 6,147,072), have been fully considered but they are not persuasive in view of the response provided in the office action of 03/05/05 regarding Dunn, Okada and Bymaster and that response is incorporated herein by reference.

33. No claim is allowed.

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

35. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BLESSING M. FUBARA whose telephone number is (571)272-0594. The examiner can normally be reached on 7 a.m. to 5:30 p.m. (Monday to Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-272-0594.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Blessing M. Fubara/
Examiner, Art Unit 1618